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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/581,521

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Guy Zanella

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12/30/2009

OWENS CORNING
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EXAMINER

MINSKEY, JACOB T

ART UNIT

PAPER NUMBER

1791

NOTIFICATION DATE

DELIVERY MODE

12/30/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USIPDEPT@owenscorning.com

Office Action Summary	Application No. 10/581,521	Applicant(s) ZANELLA, GUY	
	Examiner JACOB T. MINSKEY	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 7-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant has amended claim 1 and cancelled claims 4-6.
2. The amendments to the claims have overcome the anticipation rejection in view of Brambach, and all rejections based off this reference have been withdrawn.
3. Applicant's arguments filed 10/26/2009 in regards to the Saatchi reference have been fully considered but they are not persuasive.
4. Applicant argues that Saatchi does not teach making a molded part from a composite sandwich. Applicant is arguing that the optional skins placed around the blowing agent does not consist of a composite sandwich, but instead a simple mixture of components that are placed into a mold.
5. In this regards the Examiner respectfully disagrees. It is the Examiner's stance that Saatchi teaches a process that creates a composite sandwich in a mold and then molds that sandwich into a formed article. As described in columns 6 and 7, Saatchi describes a method that incorporates foaming agent in-between skins as they are formed. As claim 6 of Saatchi teaches, this process is done prior to a foaming of the agent due to the addition of heat and pressure. The Examiner reads this application of skins around the active agents to read on a composite sandwich. Saatchi merely describes the steps of forming the sandwich first, and then molding in subsequent steps to form the molded article.
6. Just because Saatchi teaches the skins to be an optional aspect of the invention does not make it an improper teaching. MPEP 2123 states that "Disclosed examples

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and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971).” This is the same for the Applicant’s argument about the “activator” taught by Saatchi. The foaming that occurs in step e (claim 6) will inherently force the skin layers into the mold surface creating the desired finished product.

7. Applicant further traverses the obviousness rejections of claim 11 and 12 with the arguments that the secondary references do not alleviate the deviancies discussed above. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

8. Rejections of the current claims are presented in the following sections.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-3 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Saatchi et al, USP 5,174,934.

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11. Regarding claim 1, Saatchi teaches a process for manufacturing a molded composite part (see abstract and column 1 lines 15-20) comprising: providing at least one composite sandwich material (see abstract and column 6 lines 52-60) including at least one manufactured core adhered to at least one composite skin (blowing agent and activator for blowing agent are both considered to act as expansion agents and are described as magnesium hydroxide, water and sodium borohydride, column 5 line 47-column 6 line 20); molding said at least one composite sandwich material into a molded composite part in a mold with the application of heat and pressure (see claim 6 and (column 7 lines 36-58), wherein said sandwich material has incorporated therein at least one expansion agent that reacts during said molding step to press said composite skin against a wall of said mold (and inherently would be in contact with the skin as well as inherently be present between the main material of the core and the skin). Saatchi teaches in claim 6 that the application of heat and pressure (step e) occurs after the compaction steps taught in claim 1 (steps a-d), which directly reads on the amended claims.

12. Regarding claims 2-3 and 7-10, Saatchi further teaches that the said sandwich incorporating an expansion agent (blowing agent and activator for blowing agent are both considered to act as expansion agents and are described as magnesium hydroxide, water and sodium borohydride, column 5 line 47-column 6 line 20) that is incorporated into the core of the sandwich (and inherently would be in contact with the skin as well as inherently be present between the main material of the core and the skin) and reacts during molding by heating the agent in the mold (see claim 6, step e).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saatchi et al, USP 5,174,934.

16. Regarding claim 11, Saatchi teaches controlling the final density of the product by adjusting the amount of expanding agents to add. Saatchi does not provide ranges within the instantly claimed limitations. Saatchi provide and example in which the expansion agents total .4% of the weight of the admixture (0.1 grams of blowing agent and use of a 3:1 ratio of activator equals a .4% amount of expansion agents in the core, column 5 line 36 and column 6 line 19). The amount of agent used is a result effective variable.

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17. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the claimed range of agent, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. One would have been motivated to use the claimed range of expansion agent from for the benefit of controlling the density of the final product to have desirable physical characteristics.

18. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saatchi et al, USP 5,174,934 as evidenced by Lunde, USP 6,692,681

19. Regarding claim 12, Saatchi teaches controlling the thickness of the composite sandwich by adding spacers to a compaction step (and teaches that it is obvious to adjust the thickness dependent on the mold and or use of the sandwich, column 3 lines 23-32). The thickness of the sandwich after compaction is a result effective variable.

20. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the claimed range of agent, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

21. In the same field of endeavor of molding sandwich composites, Lunde provides and example of a final product in which the thickness of the composite skin is less than 10% of the thickness of the composite sandwich (0.024 inches for skin compared to 0.71 inches for core, column 6 lines 35-45).

22. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the dimensions taught by Lunde in the Saatchi method for the benefit of

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controlling the reinforcement or rigidity of the product by adjusting the skin to core size ratio (column 6, line 49).

Conclusion

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACOB T. MINSKEY whose telephone number is (571)270-7003. The examiner can normally be reached on Monday to Friday 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JTM

/Eric Hug/
Primary Examiner, Art Unit 1791